

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-4 are pending in this application. Claims 1 and 3 are independent. Claims 1-4 are hereby amended. No new matter has been added. It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

II. SUPPORT FOR AMENDMENT IN SPECIFICATION

Support for this amendment is provided throughout the Specification as originally filed and specifically at paragraph [0034] of Applicant's corresponding published application.

By way of example and not limitation:

[0034]Moreover, an example of the lens barrel sinking system of the zoom lens system of the first embodiment will be explained with reference to FIGS. 14A and 14B. FIG. 14A is a cross sectional view including optical path bending optical axis of the state where the zoom lens system of FIG. 1 is located at the broad angle end (see FIG. 1A). In this state, the reflection mirror M of the first group GR1 is rotated with one end side Ma thereof being as fulcrum so that the reflection mirror M will be withdrawn as indicated by the arrow in Fig. 14A. Thus, the negative lens G1 of the object side of the first lens group GR1 is caused to undergo lens barrel sinking operation into space defined (formed) as the result of the fact that the reflection mirror M is withdrawn to have ability to thin the thickness in the optical axis direction (the camera depth direction) incident on the zoom lens system. It is to be noted that this also similarly applies to the zoom lens systems of

the second and third embodiments which will be described later. Here, while there is employed, in this embodiment, a configuration in which only one negative lens G1 is caused to undergo lens barrel sinking operation into space defined as the result of the fact that the reflection mirror M is withdrawn, in the case where there is employed a configuration including plural lenses at the object side relative to the reflection mirror M, plural lenses may be also caused to undergo lens barrel sinking operation. Moreover, while there is employed, in this zoom lens system, a configuration in which the reflection mirror M is rotated with one end side Ma thereof being as fulcrum so that the reflection M is withdrawn, the position of the fulcrum is not limited to one end side of the mirror. In addition, while there is employed, in this zoom lens system, the configuration in which the reflection mirror M is rotated with one end side Ma thereof being as fulcrum so that the reflection mirror M is withdrawn, withdrawal operation of the reflection mirror M is not limited to such implementation, but there may be defined a space for accommodating lens group of the object side relative to the reflection mirror M. For example, there may be employed a configuration to move the reflection mirror M in parallel to withdraw the reflection mirror M. (As amended)

III. SPECIFICATION OBJECTIONS

The Specification is hereby amended, thereby obviating the objections.

IV. REJECTIONS UNDER 35 U.S.C. §112

Claims 1 and 3 are hereby amended, thereby obviating the rejection under 35

U.S.C. §112.

V. CLAIM OBJECTIONS

Claims 1-4 are hereby amended, thereby obviating the objections.

VI. RESPONSE TO REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1-4 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 7,436,599 to Mihara (hereinafter, merely "Mihara'599") in view of U.S. Patent No. 7,301,710 to Nishioka (hereinafter, merely "Nishioka").

Claims 1-4 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,754,446 to Hagimori et al. (hereinafter, merely “Hagimori”) in view of Mihara’599.

Claim 1 recites, *inter alia*:

“...wherein, when the negative subgroup is caused to undergo a lens barrel sinking operation, the reflection member is withdrawn by being rotated with a fulcrum which is not limited to one end side of the reflection member, and the negative subgroup of the first groups is accommodated into a space thus vacated by the withdrawn reflection member.” (Emphasis added)

Applicant submits that neither Mihara’599 nor Nishioka nor Hagimori, taken alone or in combination, that would teach or suggest the above identified features of claim 1. Specifically, none of the references used as a basis for rejection discloses “when the negative subgroup is caused to undergo a lens barrel sinking operation, **the reflection member is withdrawn by being rotated with a fulcrum which is not limited to one end side of the reflection member**, and the negative subgroup of the first groups is accommodated into a space thus vacated by the withdrawn reflection member”, as recited in claim 1.

Specifically, the Office Action (see pages 6, 8 and 9) asserts that Mihara’599 discloses the mirror pivoted and moved parallel from the optical axis of lens elements L2 and L3, and refers to column 29, lines 29-36 and Figs. 16-17, which are reproduced as follow:

Mihara’599, col. 29, lines 29-36:

“FIG. 16 is a conceptual schematic of one embodiment of how to receive the optical path-bending zoom optical system in place when the reflecting optical element is constructed of a mirror M. The mirror M is tilted at a position indicated by a broken line, and lenses L2 and L3 located on the image plane I side with respect to the mirror M are tilted at positions indicated by broken lines, so that the thickness of the zoom optical system in its optical axis direction (in the depth direction of a camera) can be reduced.

FIG. 17 is a conceptual schematic of another embodiment of how to receive the optical path-bending zoom optical system in place when the reflecting optical element is formed of a mirror M. The mirror M is tilted at a position indicated by a broken line and a lens group LG located on the object side with respect to the mirror M is received in the resulting space, thereby achieving similar thickness reductions. Instead of tilting the mirror M, it may be relocated along the optical axis after bending, as shown in FIG. 15.”

FIG. 16

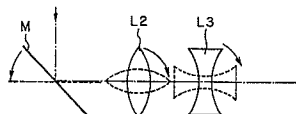
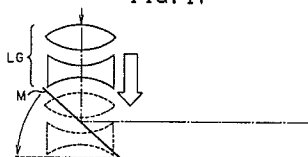


FIG. 17



Applicant submits that Mihara'599 describes that the mirror is tilted in Figs. 16-17, but nothing in Mihara'599 teaches “when the negative subgroup is caused to undergo a lens barrel sinking operation, **the reflection member is withdrawn by being rotated with a fulcrum which is not limited to one end side of the reflection member**, and the negative subgroup of the first groups is accommodated into a space thus vacated by the withdrawn reflection member”, as recited in claim 1.

Furthermore, this deficiency of Mihara'599 is not cured by the supplemental teaching of Nishioka nor Hagimori.

Therefore, Applicant submits that independent claim 1 is patentable and respectfully request reconsideration and withdrawal of the rejection.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 1, independent claim 3 is also patentable, and Applicant thus respectfully requests reconsideration of the rejections thereto.

VII. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Applicant thereby respectfully requests reconsideration and withdrawal of rejections thereto. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Because Applicant maintains that all claims are allowable for at least the reasons presented hereinabove, in the interests of brevity, this response does not comment on each and every comment made by the Examiner in the Office Action. This should not be taken as acquiescence of the substance of those comments, and Applicant reserves the right to address such comments.

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicant

By: 

Thomas F. Presson
Reg. No. 41,442
(212) 588-0800